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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/772,887	02/04/2004	Thor Itt Chiam	FLEX-00300	5368
28960 7590 05/16/2007 HAVERSTOCK & OWENS LLP 162 NORTH WOLFE ROAD SUNNYVALE, CA 94086			EXAMINER DESIR, PIERRE LOUIS	
			ART UNIT 2617	PAPER NUMBER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/772,887	Applicant(s) CHIAM ET AL.	
	Examiner Pierre-Louis Desir	Art Unit 2617	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 February 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments filed on 02/09/2007 have been fully considered but they are not persuasive.

Applicants argue that Yamadera does not teach a two-dimensional navigation key with the related functionality of selecting one of a plurality of main menu items of the main menu and selecting a sub-menu item of the sub-menu associated with a selected main menu item.

To support this argument, Applicants first describes that Yamadera teaches that the cited element 4 is a curser key 4, which moves in one of four directions (up, down, left, right) to scroll through menu items on the display menu 10a. The curser key 4 also has a pushbutton function, which allows the user to press the curser key 4 to confirm a menu item that has been highlighted (Yamadera, paragraph [0042]). This is the exact definition of a conventional three-dimensional navigation key. A three-dimensional navigation key operates in the x-direction (left and right), the y-direction (up and down), and the z-direction (pushing the button), thus three-dimensional. In contrast, a two-dimensional navigation key operates in only two dimensions, the x-direction (left and right) and the y-direction (up and down). A two-dimensional navigation key does not operate in the z-direction. In other words, a two-dimensional navigation key does not accept a pushbutton operation. The present application, continue applicants, explicitly defines the operation of, and the differences between, a two-dimensional navigation key and a three-dimensional navigation key (Present Specification, page 2, lines 1-15).

Examiner respectfully disagrees with applicants. First referring to Applicants' specification page 3 line 25 to page 4, line 7, wherein it is disclosed, "By way of example,

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consider a cellular phone that has a main menu and at least one level of sub-menus. In this example, the user toggles among main menu items by selecting left or right on the two-dimensional navigation key. The currently selected main menu item is highlighted in some manner as discussed in more detail below. By pressing to the down direction, that main menu item is selected and the screen will change appropriately. If the selection was incorrect, the user can press to the left direction to revert back to the previous level. If the selected main menu item has more than one sub-menu item, the user can select among those sub-menu items by pressing up or down and sequentially highlighting sub-menu items. Upon highlighting the desired sub-menu item, it can be selected by pressing to the right and de-selected by pressing to the left. This process can continue if the selected sub-menu item has sub-sub-menus. It will be apparent that the choice of left versus right, up, down or even diagonals is merely optional.” Emphasis added.

As can be seen above (in applicants’ own specification), first, the user toggles among main menu items, and the currently selected main menu item is highlighted. And, by pressing to the down direction, the main menu item is selected.

Yamadera discloses that the cursor key 4, which may be moved in four directions (up/down, right/left), is used to select menu items from the display screen 10a. The cursor key 4, which also has the pushbutton function, allows the user to press the cursor key 4 to confirm a menu item that has been selected (see paragraphs 42, 60-62). Thus, the cursor 4 may be moved in four directions to select the menu, and the same cursor is pressed to confirm the selection.

Further, Applicants define a three-dimensional key as a key similar to a two-way key also having a fifth set of contacts, which are activated by pressing on the navigation key in approximately the center.

As can be seen in the cited passage of Yamadera, there is no disclosure of a cursor key having a fifth set of contacts, which are activated by pressing on the navigation key in approximately the center. From the disclosure found within the specification of the current application as related to a two-way dimensional key (i.e., the user toggles among main menu items, and the currently selected main menu item is highlighted. And by pressing to the down direction (i.e., pressing down of the key), the main menu is selected), Yamadera disclosure of a cursor Key reads on the claim as written. Therefore, the rejection stands.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-14 and 17-24, and 26 are rejected under 35 U.S.C. 102(e) as being anticipated by Yamadera et al. (Yamadera), U.S. Patent Application Publication No. 2003/0064757.

Regarding claim 1, Yamadera discloses a menu-driven electronic device (Figure 1) comprising:

- a. a display configured to selectively display one of a plurality of menus (Figure 1, element 10), including a main menu and a sub-menu (Figures 7A to 7D) and
- b. a two-dimensional navigation key (Figure 1, element 4) configured to select one of a plurality

of main menu items of the main menu (paragraphs 42 and 59 to 63 and 76 to 82) and to select a sub-menu item of the sub-menu associated with a selected main menu item (Id.).

Regarding claim 18, Yamadera a menu-driven wireless telecommunications device (Figure 1) comprising:

- a. a display configured to selectively display one of a plurality of menus (Figure 1, element 10), including a main menu and a sub-menu (Figures 7A to 7D), and
- b. a two-dimensional navigation key (Figure 1, element 4) configured to select one of a plurality of main menu items of the main menu (paragraphs 42, 59 to 63, and 76 to 82) and to select a sub-menu item of the sub-menu associated with a selected main menu item (Id.), wherein the device displays a plurality of sub-menu items (Id.).

Regarding claim 23, Yamadera discloses a menu-driven wireless telecommunications device (Figure 1) comprising:

- a. a display configured to selectively display one of a plurality of menus (Figure 1, element 10), including a main menu and a first sub-menu (Figures 7a to 7D), and
- b. a two-dimensional navigation key (Figure 1, element 4) configured to select one of a plurality of main menu items of the main menu (paragraphs 42, 59 to 63 and 76 to 82) and to select a first sub-menu item of the first sub-menu associated with a selected main menu item (Id.), and further to select a second sub-menu item of the second sub-menu associated with the selected main menu item (Id.).

Regarding claim 2, Yamadera discloses a device (see claim 1 rejection) wherein at least a portion of the plurality of main menu items is displayed (Figure 1), and further wherein both the main menu and the sub-menu can be accessed by maintaining contact with the two-dimensional

key. See paragraphs 60 and 62, it would be inherent that a user could navigate through the menus by maintaining contact with the navigation keys.

Regarding claim 3, Yamadera discloses a device (see claim 1 rejection) wherein the device is configured to allow navigation through the plurality of menus by using the two-dimensional navigation key. *Id.*

Regarding claim 4, Yamadera discloses a device (see claim 1 rejection) wherein the device is configured to allow navigation through the plurality of menus while maintaining tactile contact with the two-dimensional navigation key. See claim 2 and 3.

Regarding claim 5, Yamadera discloses a device (see claim 1 rejection) wherein the device is configured to allow toggling among the at least two control levels by a single access of the two-dimensional navigation key. See paragraphs 60 to 63.

Regarding claim 6, Yamadera discloses a device (see claim 1 rejection) wherein the device is configured to allow toggling between the main menu and one of the plurality of main menu items by using a first direction of the two-dimensional navigation key and to allow toggling between the selected main menu item and the sub-menu associated with the selected main menu item by using a second direction of the two-dimensional navigation key. See e.g. paragraph 64.

Regarding claim 7, Yamadera discloses a device (see claim 1 rejection) wherein the device is configured to allow scrolling among at least two control levels by a single access of the two-dimensional navigation key. See paragraphs 60 to 64.

Regarding claim 8, Yamadera discloses a device (see claim 1 rejection) wherein the device is configured to display the selected main menu item simultaneously with the sub-menu

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associated with the selected main menu item. See Figure 7B and its corresponding description.

Regarding claim 9, Yamadera discloses a device (see claim 1 rejection) wherein the device is configured to display the selected main menu item simultaneously with a plurality of sub-menu items associated with the selected main menu item. See Figure 7B and its corresponding description.

Regarding claim 10, Yamadera discloses a device (see claim 1 rejection) wherein the plurality of menus are organized in a menu tree. See Figure 2.

Regarding claim 1, Yamadera discloses a device (see claim 1 rejection) wherein the main menu further comprises a main menu item icon representing a main menu item. See Figure 7A and its corresponding description.

Regarding claim 12, Yamadera discloses a device (see claim 11 rejection) wherein the device is configured to display the main menu item icon to provide a visual reference to an item in the menu tree of the menu being displayed. See Figures 7A-D and their corresponding descriptions.

Regarding claim 13, Yamadera discloses a device (see claim 12 rejection) wherein when the device displays at least a portion of the main menu, the main menu item icon is displayed in a first appearance, and when the device displays the sub-menu, the main menu item icon is displayed in a second appearance different from the first appearance. See Figures 7A-7C and their corresponding descriptions.

Regarding claim 14, Yamadera discloses a device (see claim 13 rejection) wherein the first appearance differs from the second appearance by at least one of size, shape, color, highlighting, and pattern. Id.

Regarding claim 17, Yamadera discloses a device (see claim 1 rejection) wherein the device is a phone. See Figure 1 and its corresponding description.

Regarding claim 19, Yamadera discloses a device (see claim 18 rejection) including wherein when the device displays on the display the sub-menu associated to the selected main menu item, a main menu icon is displayed in the sub-menu to provide a visual reference to the selected main menu item in the menu tree of the menu being displayed. See Figures 7A to 7D and their corresponding descriptions.

Regarding claim 20, Yamadera discloses a device (see claim 18 rejection) including wherein the plurality of menus includes a first sub-menu and a second sub-menu (Figures 7A-D and their corresponding descriptions), wherein the first sub-menu further comprises a plurality of first sub-menu items (Id.) and further wherein one of the plurality of first sub-menu items is associated to a second sub-menu (Id.).

Regarding claim 21, Yamadera discloses a device (see claim 20 rejection) including wherein the second sub-menu further comprises a plurality of second sub-menu items. Figures 7A-D and their corresponding descriptions.

Regarding claim 22, Yamadera discloses a device (see claim 21 rejection) wherein a third orientation of the two-dimensional navigation key is configured to select one of the plurality of second sub-menu items. See paragraphs 77 to 81.

Regarding claim 24, Yamadera discloses a device (see claim 23 rejection) wherein the device is configured to allow scrolling between the main menu and one of the plurality of main menu items by using a first direction of the two-dimensional navigation key (paragraphs 76 to 77), to allow scrolling between the selected main menu item and the first sub-menu associated

with the selected main menu item by using a second direction of the two-dimensional navigation key (Id.), and further to allow scrolling between the second sub-menu associated with the selected main menu item and a second sub-menu item by using a third direction of the two-dimensional navigation key (paragraphs 78 to 79).

Regarding claim 26, Yamadera discloses a device (see claim 23 rejection), including wherein the device is configured to display a main menu item icon to provide a visual reference to an item in a menu tree of the menu being displayed. See Figures 7A-D.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 15 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamadera.

Yamadera also teaches all the elements of dependent claim 15, except wherein when the device displays the sub-menu, the main menu item icon is displayed in a third size different from the first size and the second size. However, see MPEP 2144, changing the size of an element of the claimed invention does not patentably distinguish the claimed invention. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to change the size of the main menu icon to various sizes, including a different size than either the first or second size.

Yamadera discloses all the elements of dependent claim 25, except wherein the third direction corresponds with the first direction of the two-dimensional navigation key. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to understand that the directions used to select the first and third directions could be the same because Yamadera teaches that the first direction may be up and the third direction may be pointed in any of four directions, up, down, right, or left. See Yamadera, paragraph 78.

6. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamadera in view of U.S. Patent No. 6,463,304 to Smethers, U.S. Patent No. 6,463,304.

Yamadera also teaches all the elements of dependent claim 16, except wherein the main menu further comprises a non-graphical listing of the plurality of sub-menu items of the sub-menu associated with the selected main menu item.

However, Smethers, in the same field of endeavor teaches the use of non-graphical listings in addition to icons. See e.g. Figure 3B.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use non-graphical listings in the sub-menus, for example because a listing of "content channels" is more efficient than attempting to describe them using icons, as in Smethers. See column 6, lines 35 to 45.

*Conclusion*

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pierre-Louis Desir whose telephone number is (571) 272-7799. The examiner can normally be reached on Monday-Friday 8:00AM- 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on (571) 272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Pierre-Louis Desir  
05/07/2007



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